November 10, 1999

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 99-72
NPDES PERMIT NO. CA0107981

WASTE DISCHARGE REQUIREMENTS
FOR THE CITY OF ESCONDIDO
HALE AVENUE RESOURCE RECOVERY FACILITY

DISCHARGE TO THE PACIFIC OCEAN
VIA THE ESCONDIDO LAND OUTFALL AND
THE SAN ELIJO OCEAN OUTFALL

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The California Regional Water Quality Control Board, San Diego Region (hereinafter referred to as Regional Board) finds that:

1. On March 23, 1981, this Regional Board adopted Order No. 81-10, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido Hale Avenue Wastewater Treatment Facility, San Diego County. Order No. 81-10, and Addendum No. 1 thereto, established requirements for the discharge of up to 16.5 million gallons per day (MGallons/Day) of treated wastewater from the City of Escondido Hale Avenue Wastewater Treatment Facility to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall. Order No. 81-10 contained an expiration date of March 23, 1986.

2. On June 6, 1988, this Regional Board adopted Order No. 88-04, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido Hale Avenue Water Pollution Control Facility Discharge Through the San Elijo Ocean Outfall, San Diego County, superseding Order No. 81-10. Order No. 88-04, and Addenda Nos. 1, 2, and 3 thereto, established requirements for the discharge of up to 17.5 MGallons/Day of treated wastewater from the Hale Avenue Water Pollution Control Facility to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall, provided that certain conditions were met[1]. Monitoring and Reporting Program No. 81-10 remained in effect with the adoption of Order No. 88-04, as no new monitoring and reporting program was issued with Order No. 88-04. Order No. 88-04, as amended by Addendum No. 3, contained an expiration date of June 6, 1993.

3. On November 10, 1994, this Regional Board adopted Order No. 94-104, NPDES No. CA0107981, Waste Discharge Requirements for the City of Escondido Hale Avenue Resource Recovery Facility Discharge to the Pacific Ocean Via the Escondido Land Outfall and San Elijo Ocean Outfall, superseding Order No. 88-04. Order No. 94-104 established requirements for the discharge of up to 16.5 MGallons/Day of treated wastewater from the Hale Avenue Resource Recovery Facility (HARRF) to the Pacific Ocean via the Escondido Land Outfall to the San Elijo Ocean Outfall. On July 1, 1995 Technical Change Order No.1 substituted Monitoring and Reporting Program 94-104 in its entirety.

4. On April 30, 1999, the City of Escondido submitted a deficient application for the renewal of its NPDES permit pursuant to Reporting Requirement No. E.2 of Order No. 94-104. On June 10, 1999, the City of Escondido re-submitted a revised application, and after minor revisions on August 23,1999, the application was determined to be complete.

5. This Order is a renewal of NPDES permit No. CA010791 and supersedes Order No. 94-104. This Order expires November 10, 2004.

6. The HARRF is a publicly owned treatment works (POTW) owned by the City of Escondido which treats residential, commercial, and industrial wastewater generated in the City of Escondido and in the Rancho Bernardo portion of the City of San Diego. The City of San Diego has contracted with the City of Escondido for treatment of up to 5.5 MGallons/Day of wastewater from Rancho Bernardo at the HARRF.

7. The HARRF is located at 1521 Hale Avenue in the City of Escondido, adjacent to Escondido Creek.

8. Wastewater treatment unit operations and processes at the HARRF consist of preliminary treatment by screening, grit removal, primary sedimentation using clarifiers, and biological treatment using activated sludge followed by secondary clarification. Sludge is thickened by dissolved air floatation, anaerobically digested, and mechanically dewatered. Final sludge disposal is by offsite reuse and/or disposal in a landfill.

9. The City of Escondido is completing construction of tertiary treatment facilities for the HARRF to reclaim wastewater for beneficial use. Tertiary treatment will include coagulation and flocculation, filtration, and disinfection. The discharge of reclaimed water for beneficial use is regulated by State Waste Discharge Requirements in this Regional Board's Order No. 93-70, Waste Discharge Requirements for the City of Escondido Hale Avenue Regional Reclamation Facility, San Diego County.

10. On September 9, 1998, this Regional Board adopted Order No. 98-10, NPDES No. CA010944, Waste Discharge Requirements for the City of Escondido's Hale Avenue Resource Recovery Facility, Intermittent Wet Weather Discharge to Escondido Creek, San Diego County. Order No. 98-10 establishes requirements under which the City of Escondido could, during extreme hydrologic events (estimated to be at least a 2-year storm), discharge disinfected tertiary-treated reclaimed water into Escondido Creek. To offset the fact that nutrients will not be removed from the reclaimed water; the City of Escondido intends to initiate a nutrient removal program by November 2000, whereby the City will divert surface water runoff that would otherwise reach the lagoon, from a concrete lined channel directly to the outfall. This diversion would compensate for the nutrient loading that may occur from the intermittent wet weather dicharge.

11. The HARRF's Report of Waste Discharge indicates that the average dry-weather flow rate from the HARRF is approximately 15.9 MGallons/Day. According to information provided by the discharger, approximately 3.8 MGallons/Day of the average flow rate originates from the City of San Diego's Rancho Bernardo portion of the service area.

12. Effluent from the HARRF is discharged to the Pacific Ocean through the San Elijo Ocean Outfall (SEOO) via the Escondido Land Outfall (ELO). The ELO is owned by the City of Escondido. The SEOO is owned by the San Elijo Joint Powers Authority (SEJPA), and 79% of the SEOO capacity is leased to the City of Escondido. The discharge through the SEOO from the SEJPA is regulated by a separate NPDES permit (NPDES No. CA0107999). Both permits discharging to the SEOO share the same receiving water limitations and Monitoring and Reporting Program requirements.

13. The ELO extends from the HARRF southwesterly approximately 14 miles to its junction with the SEOO, generally following Escondido Creek. The hydraulic design capacity of the ELO is 27.6 MGallons/Day.

14. The SEOO extends southwesterly from a point approximately 2,200 feet south of the mouth of San Elijo Lagoon. The inshore end of the diffuser is located approximately 6,800 feet offshore at a depth of approximately 110 feet. The diffuser, which is collinear with the outfall, is approximately 1,200 feet long and extends to a depth of approximately 148 feet. The terminus of the diffuser is located at Latitude 33° 00' 21" North, Longitude 117° 18' 9" West.

15. The design capacity of the SEOO is 25.5 MGallons/ Day. The current operating capacity of the SEOO is approximately 24.3 MGallons/ Day. The addition of 1.55 MGallons/Day to the SEWRF's previously permitted 3.7, in combination with the

City of Escondido's permitted 16.5 MGallons/Day results in a net discharge of 21.75 MGallons/Day to the SEOO. Based on characteristics of the SEOO, State Water Resources Control Board (SWRCB) staff has determined the minimum initial dilution for the SEOO, with 200 diffuser ports open and a flowrate of 24 MGallons/ Day, to be 220, using the computer model UMERGE.

16. The SWRCB adopted a revised Water Quality Control Plan for Ocean Waters of California (California Ocean Plan) on July 23, 1997. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:

    a. Industrial water supply
    b. Navigation
    c. Water contact recreation
    d. Non-contact water recreation
    e. Ocean commercial and sport fishing
    f. Preservation and enhancement of Areas of Special Biological Significance
    g. Preservation of rare and endangered species
    h. Marine habitat
    i. Mariculture
    j. Fish migration
    k. Fish spawning
    l. Shellfish harvesting
    m. Aesthetic enjoyment

    In order to protect these beneficial uses, the Ocean Plan establishes water quality objectives (for bacterial, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharge to the ocean, quality requirements for waste discharges (effluent water quality requirements), discharge prohibitions, and general provisions.

17. The Comprehensive Water Quality Control Plan Report, San Diego Basin (9), (Basin Plan) was adopted by this Regional Board on March 17, 1975 and subsequently approved by the SWRCB. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the SWRCB.

18. The Basin Plan identifies the following beneficial uses of state ocean waters to be protected:

a. Industrial service supply
b. Navigation
c. Water contact recreation
d. Noncontact water recreation
e. Ocean commercial and sport fishing
f. Preservation of Areas of Special Biological Significance (ASBS)
g. Preservation of rare and endangered species
h. Marine habitat
i. Mariculture
j. Fish migration
k. Fish spawning
l. Shellfish harvesting
m. Wildlife habitat

The Basin Plan relies primarily on the requirements of the Ocean Plan for protection of these beneficial uses. The Basin Plan, however, establishes additional water quality objectives for dissolved oxygen and pH.

19. The 1997 Ocean Plan states that, "Water shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in that area."

The marine habitat beneficial use identified in both the Ocean Plan and Basin Plan provides for the preservation of the marine ecosystem in the City of Encinitas Marine Life Refuge. The City of Encinitas Marine Life Refuge, described in Fish and Game Code Section 10913, is located approximately 11,000 feet northeast of the inshore end of the SEOO diffuser. The refuge is generally bounded to the north by the westerly prolongation of the northerly right-of-way line of D Street, and to the south by the southwesterly prolongation of the southeasterly line of Lot N in Block 3 of Resubdivision of Sea Cliff Villa in the City of Encinitas, and includes submerged lands and ocean waters 600 feet west of the mean high tide line.

Regional Board staff's review of the monitoring data submitted by the discharger in accordance with the Monitoring and Reporting Program of Order No. 94-104

have not revealed any impacts on the City of Encinitas Marine Life Refuge resulting from the SEOO discharge. No impacts to the refuge area are expected to occur in the future.

20. Receiving Water Limitation No. C.1.a. (2) of this Order establishes bacterial objectives for areas where shellfish may be harvested for human consumption, as determined by the Regional Board. However, as of the date of adoption of this Order, this Regional Board has not designated any shellfish harvesting area. If and when this Regional Board, in consultation with the Department of Fish and Game, health agencies, and other interested parties, does designate shellfish harvesting areas in the vicinity of this discharge, this Order will be amended to identify the area(s) to which Receiving Water Limitation No. C.1.a. (2) applies.

21. Federal regulations (40 CFR Part 403) establish pretreatment program requirements for POTWs that receive pollutants from industries subject to pretreatment standards. This Order contains industrial pretreatment program requirements pursuant to 40 CFR Part 403. (See Pretreatment Requirements, Section D.)

22. On March 28, 1983, the United States Environmental Protection Agency (USEPA), Region 9, granted final industrial pretreatment program approval to the City of Escondido. On June 29, 1982, USEPA Region 9 granted final industrial pretreatment program approval to the City of San Diego. Because up to 5.3 MGallons/Day of wastewater from the Rancho Bernardo service area can be discharged to the City of Escondido's treatment facility, it was agreed, through a Memorandum of Agreement dated February 15, 1995, that administrative implementation of the pretreatment program in the Rancho Bernardo area of San Diego is the responsibility of the City of San Diego.

23. On April 30, 1998, a line break occurred in a 20-inch diameter force main that conveys domestic and industrial wastewater from the Rancho Bernardo service area to the HARRF, resulting in a discharge of 1,560,000 gallons of untreated sewage into Lake Hodges, a local domestic water supply. In conjunction with the City of Escondido, the City of San Diego has implemented additional steps and procedures to ensure against failure of the wastewater pipeline to the HARRF. A telemetry system has been installed that reports line pressure to the operations staff, and coordination efforts with the City of Escondido have been improved, in order to further reduce the possibility of a spill into Lake Hodges.

24. On November 16, 1990, the USEPA promulgated NPDES permit application requirements for storm water discharges (40 CFR Parts 122, 123, and 124) which are applicable to the HARRF. On November 19, 1991, the State Water Resources Control Board adopted Water Quality Order No. 91-13-DWQ, National

Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated With Industrial Activities Excluding Construction Activities. Storm water discharges from the HARRF are subject to the terms and conditions of Water Quality Order No. 91-13-DWQ, as amended.

25. Municipal storm water discharges are regulated separately under NPDES Order No. 90-42 (CA0108758), Waste Discharge Requirements for Storm Water and Urban Runoff from the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District. The City of Escondido is considered a co-permittee participant in this permit, which is currently scheduled for renewal.

26. On February 19, 1993, the USEPA issued the final rule for the use and disposal of sewage sludge (40 CFR Part 503). This regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The USEPA, not this Regional Board, oversees compliance with 40 CFR Part 503.

27. Section 301(b)(1)(B) of the Clean Water Act (CWA) requires POTWs to meet effluent limitations based on secondary treatment as defined by the USEPA Administrator. Secondary treatment is defined by the USEPA Administrator in the federal regulations (40 CFR Part 133.100 to 40 CFR Part 133.105) in terms of three parameters: 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. Federal regulations allow substitution of 5-day carbonaceous biochemical oxygen demand ($CBOD_5$) limitations for BOD_5 limitations. On June 20, 1988, the City of Escondido submitted a Report of Waste Discharge, requesting that the City's discharge specifications for BOD_5 be changed to $CBOD_5$. Addendum No. 2 to Order No. 88-04 substituted $CBOD_5$ effluent limitations for BOD_5 limitations. Discharge Specification B.1.a. of this Order establishes effluent limitations for $CBOD_5$, TSS, and pH in accordance with federal secondary treatment regulations. In addition, Discharge Specification B.1.a of this Order establishes "Maximum at Any Time" limitations for $CBOD_5$ and TSS and the Monitoring and Reporting Program of this Order establishes effluent monitoring requirements for both $CBOD_5$ and BOD_5. Mass emission rate (MER) limitations are based on a flow rate of 16.5 MGallons/Day.

28. Monitoring and Reporting Program No. 99-72 may be subject to changes during the 5 -year period of this permit. The Southern California Coastal Water Research Project (SCCWRP) is currently investigating more effective techniques to monitor receiving waters of the Pacific Ocean. Once the SCCWRP study is complete, these methods may be incorporated into this Order's Monitoring and Reporting Program through an Addendum to this Order.

29. Effluent limitations, industrial pretreatment standards, sludge use and disposal regulations, and ocean discharge criteria established under Sections 208(b), 301, 302, 303(d), 304, 306, 307, 403, and 405 of the CWA, as amended (Title 33 United States Code (USC) 1251 et seq.), are applicable to the discharge.

30. Waste discharge requirements for this discharge must be in conformance with 40 CFR 131.12 and State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (known collectively as "antidegradation" policies). Since effluent concentration and mass emission rate limitations in this Order have been derived according to 1997 Ocean Plan procedures, adoption of this Order is consistent with antidegradation policies.

31. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:

    a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;

    b. Other waste discharges;

    c. The need to prevent nuisance;

    d. Past, present, and probable future beneficial uses of water;

    e. Environmental characteristics of the receiving waters under consideration, including the quality of those receiving waters;

    f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;

    g. Economic considerations

    h. The need for developing housing within the region; and

    i. The need to develop and use recycled water.

32. The issuance of waste discharge requirements for this discharge is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.

33. The Regional Board has notified the City of Escondido and all known interested

parties of its intent to reissue the NPDES permit for the discharge from the Hale Avenue Resource Recovery Facility to the Pacific Ocean.

34. The Regional Board, in a public hearing held November 10, 1999, has heard and considered all comments pertaining to the discharge from the Hale Avenue Resource Recovery Facility to the Pacific Ocean via the Escondido Land Outfall and the San Elijo Ocean Outfall.

35. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit for the discharge from the City of Escondido Hale Avenue Resource Recovery Facility to the Pacific Ocean pursuant to Section 402 of the Clean Water Act, and amendments thereto.

IT IS HEREBY ORDERED that the City of Escondido (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and the regulations adopted thereunder, shall comply with the following for the handling, treatment, and disposal of wastes through the San Elijo Ocean Outfall from the City of Escondido Hale Avenue Resource Recovery Facility:

A. PROHIBITIONS

1. Discharges of wastes in a manner or to a location which have not been specifically authorized by this Order and for which valid waste discharge requirements are not in force are prohibited.

2. The dumping or deposition, from shore or from vessels, of oil, garbage, trash or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.

3. Compliance with Discharge Prohibitions as stated in Chapter V of the 1997 Ocean Plan, and listed in Attachment 1 hereto, is required as a condition of this Order.

4. Compliance with Waste Discharge Prohibitions contained in the 1994 Basin Plan (Attachment 2) is also required as a condition of this Order.

5. Discharge to the Pacific Ocean from the Hale Avenue Resource Recovery Facility via the Escondido Land Outfall and San Elijo Ocean Outfall in excess of 16.5 MGallons/Day is prohibited unless the discharger obtains the approval of the Regional Board for a revised design capacity in accordance with Provision F.13 of this Order.

B. DISCHARGE SPECIFICATIONS

1. The following effluent limitations apply to the undiluted effluent discharged from the Hale Avenue Resource Recovery Facility through the San Elijo Ocean Outfall.

a. Effluent Limitations for Major Constituents and Properties of Wastewater

Constituent/ Property	Units	Monthly Average (30 day)	Weekly Average (7 day)	Maximum at any time
$CBOD_5$[2]	mg/L lb/Day	25 3,400	40 5,500	45 6,200
total suspended solids[2,3]	mg/L lb/Day	30 4,100	45 6,200	50 6,900
oil & grease[3]	mg/L lb/Day	25 3,400	40 5,500	75 10,000
settleable solids[3]	mL/L	1.0	1.5	3.0
turbidity[3]	NTU	75	100	225
PH[2,3]	pH units	Within limits of 6.0 - 9.0 at all times.		
acute toxicity[3]	TUa	1.5	2.0	2.5

b. Effluent Limitations on Toxic Materials for Protection of Marine Aquatic Life[4]

Constituent/ Property	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
arsenic	ug/L lb/Day	1,100 150	6,400 880	17,000 2,300
cadmium	ug/L lb/Day	220 30	880 120	2,200 300
chromium (hexavalent)[5]	ug/L lb/Day	440 61	1,800 240	4,400 610
copper	ug/L lb/Day	220 31	2,200 300	6,200 850
lead	ug/L lb/Day	440 61	1,800 240	4,400 610
mercury	ug/L lb/Day	8.7 1.2	35 4.9	88 12
nickel	ug/L lb/Day	1,100 150	4,400 610	11,000 1,500
selenium	ug/L lb/Day	3,300 460	13,000 1,800	33,000 4,600
silver	ug/L lb/Day	64 8.8	360 50	960 130
zinc	ug/L lb/Day	2,700 370	16,000 2,200	42,000 5,800
cyanide[6]	mg/L lb/Day	0.22 30	0.88 120	2.2 300
total chlorine residual[7]	mg/L lb/Day	0.44 61	1.8 240	13 1,800
ammonia (as N)	mg/L lb/Day	130 18,000	530 73,000	1,300 180,000
chronic toxicity	TUc	--	200	--
phenolic compounds (non-chlorinated)	mg/L lb/Day	6.6 910	27 3,600	66 9,100

Constituent/ Property	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
chlorinated phenolics	mg/L lb/Day	0.22 30	0.88 120	2.2 300
endosulfan[8]	ug/L lb/Day	1.9 0.27	4.0 0.55	6.0 0.82
endrin	ug/L lb/Day	0.44 0.061	0.88 0.12	1.3 0.18
HCH[9]	ug/L lb/Day	0.88 0.12	1.8 0.24	2.7 0.36
radioactivity[10]	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Group 3, Article 1, Section 30253 of the California Code of Regulations.			

c. Effluent Limitations for Toxic, Noncarcinogenic Materials for Protection of Human Health[4]

Constituent/ Property	Units	Monthly Average (30-day)
acrolein	ug/L lb/Day	49,000 6,700
antimony	ug/L lb/Day	270,000 36,000
bis(2-chloroethoxy)methane	ug/L lb/Day	970 130
bis(2-chloroisopropyl) ether	ug/L lb/Day	270,000 36,000
chlorobenzene	ug/L lb/day	130,000 17,000
chromium (III)	ug/L lb/Day	42,000,000 5,800,000
di-n-butyl phthalate	ug/L lb/Day	770,000 110,000
dichlorobenzenes[11]	ug/L lb/Day	1,100,000 160,000
1,1-dichloroethylene	ug/L lb/Day	1,600,000 220,000
diethyl phthalate	ug/L lb/Day	7,300,000 1,000,000
dimethyl phthalate	ug/L lb/Day	180,000,000 25,000,000
4,6-dinitro-2-methylphenol	ug/L lb/Day	49,000 6,700
2,4-dinitrophenol	ug/L lb/Day	880 120
ethylbenzene	ug/L lb/Day	910,000 120,000

Constituent/ Property	Units	Monthly Average (30-day)
fluoranthene	ug/L lb/Day	3,300 460
hexachlorocyclopentadiene	ug/L lb/Day	13,000 1,800
isophorone	ug/L lb/Day	33,000,000 4,600,000
nitrobenzene	ug/L lb/Day	1,100 150
thallium	ug/L lb/Day	3,100 430
toluene	ug/L lb/Day	19,000,000 2,600,000
1,1,2,2-tetrachloroethane	ug/L lb/Day	270,000 36,000
tributyltin	ug/L lb/Day	0.31 0.043
1,1,1-trichloroethane	ug/L lb/Day	120,000,000 16,000,000
1,1,2-trichloroethane	ug/L lb/Day	9,500,000 1,300,000

d. Effluent Limitations for Toxic, Carcinogenic Materials for Protection of Human Health[4]

Constituent/ Property	Units	Monthly Average (30-day)
acrylonitrile	ug/L lb/Day	22 3.0
aldrin	ug/L lb/Day	0.0049 0.00067
benzene	ug/L lb/Day	1,300 180
benzidine	ug/L lb/Day	0.015 0.0021
beryllium	ug/L lb/Day	7.3 1.0
bis(2-chloroethyl)ether	ug/L lb/Day	10 1.4
bis(2-ethylhexyl)phthalate	ug/L lb/Day	770 110
carbon tetrachloride	ug/L lb/Day	200 27
chlordane[12]	ug/L lb/Day	0.0051 0.00070
chloroform	ug/L lb/Day	29,000 4,000
DDT[13]	ug/L lb/Day	0.038 0.0052
1,4-dichlorobenzene	ug/L lb/Day	4,000 550
3,3-dichlorobenzidine	ug/L lb/Day	1.8 0.25
1,2-dichloroethane	ug/L lb/Day	29,000 4,000
dichloromethane	ug/L lb/Day	99,000 14,000

Constituent/ Property	Units	Monthly Average (30-day)
1,3-dichloropropene	ug/L lb/Day	2,000 270
dieldrin	ug/L lb/Day	0.0088 0.0012
2,4-dinitrotoluene	ug/L lb/Day	570 79
1,2-diphenylhydrazine	ug/L lb/Day	35 4.9
halomethanes[14]	ug/L lb/Day	29,000 4,000
heptachlor[15]	ug/L lb/Day	0.16 0.022
hexachlorobenzene	ug/L lb/Day	0.046 0.0064
hexachlorobutadiene	ug/L lb/Day	3,100 430
hexachloroethane	ug/L lb/Day	550 76
N-nitrosodimethylamin	ug/L lb/Day	1,600 220
N-nitrosodiphenylamine	ug/L lb/Day	550 76
PAHs[16]	ug/L lb/Day	1.9 0.27
PCBs[17]	ug/L lb/Day	0.0042 0.00058
TCDD equivalents[18]	pg/L lb/Day	0.86 0.00000012
tetrachloroethylene	ug/L lb/Day	22,000 3,000

Constituent/ Property	Units	Monthly Average (30-day)
toxaphene	ug/L lb/Day	0.046 0.0064
trichloroethylene	ug/L lb/Day	6,000 820
2,4,6-trichlorophenol	ug/L lb/Day	64 8.8
vinyl chloride	ug/L lb/Day	8,000 1,100

mg/L = milligrams per liter
ug/L = micrograms per liter
ng/L = nanograms per liter
pg/L = picograms per liter
mL/L = milliliters per liter
NTU = Nephelometric Turbidity Units
TUa = toxic units acute
TUc = toxic units chronic
lb/Day = pounds per day

2. Any significant change in waste flow shall be cause for reevaluating effluent quality requirements.

3. The 30-day average percent removal of $CBOD_5$ and TSS shall not be less than 85 percent.

4. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.

5. Waste discharged through the San Elijo Ocean Outfall must be essentially free of:

   a. Material that is floatable or will become floatable upon discharge.

   b. Settleable material or substances that form sediments which degrade benthic communities or other aquatic life.

   c. Substances which will accumulate to toxic levels in marine waters, sediments, or biota.

d. Substances that significantly decrease the natural light to benthic communities and other marine life.

e. Materials that result in aesthetically undesirable discoloration of the ocean surface.

6. Waste discharged through the San Elijo Ocean Outfall shall be discharged in a manner that provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.

7. Waste that contains pathogenic organisms or viruses should be discharged a sufficient distance from shellfishing and water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard should be used.

8. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

9. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from a 100-year frequency 24-hour storm.

10. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer.

11. The discharge of substances for which effluent limitations are not established by this Order shall be prevented or, if the discharge cannot be prevented, minimized.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste through the San Elijo Ocean Outfall shall not, by itself or jointly with any other discharge, cause violation of the following Ocean Plan ocean water quality objectives. Compliance with the water quality objectives shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.

a. Bacterial Characteristics

(1) Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the

shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, but including all kelp beds, the following bacterial objectives shall be maintained throughout the water column:

(a) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).

(b) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

The "Initial Dilution Zone" of wastewater outfalls shall be excluded from designation as kelp beds for purposes of bacterial standards. Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp beds for purposes of bacterial standards. Kelp beds, for the purpose of the bacterial standards of this Order, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

(2) Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

b. Bacterial Assessment and Remedial Action Requirements

The requirements listed below shall be used to: 1) determine the occurrence and extent of any impairment of a beneficial use due to bacterial contamination; 2) generate information which can be used in the development of an enterococcus standard; and 3) provide the basis for remedial actions necessary to minimize or eliminate any impairment of a beneficial use.

Measurement of enterococcus density shall be conducted at all stations where measurement of total and fecal coliforms are required. In addition to the

requirements of Receiving Water Limitation C.1.a of this Order, if a shore station consistently exceeds a coliform objective or exceeds a geometric mean enterococcus density of 24 organisms per 100 ml for a 30-day period or 12 organisms per 100 ml for a six-month period, the Regional Board may require the discharger to conduct or participate in a survey to determine the source of the contamination. The geometric mean shall be a moving average based on no less than five samples per month, spaced evenly over the time interval. When a sanitary survey identifies a controllable source of indicator organisms associated with a discharge of sewage, the Regional Board may require the discharger and any other responsible parties identified by the Regional Board to take action to control the source.

c. Physical Characteristics

(1) Floating particulates and grease and oil shall not be visible.

(2) The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.

(3) Natural light shall not be significantly reduced at any point outside the initial dilution zone as a result of the discharge of waste.

(4) The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.

d. Chemical Characteristics

(1) The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen-demanding waste materials.

(2) The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.

(3) The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.

(4) The concentration of substances set forth in Receiving Water Limitation C.3 of this Order in marine sediments shall not be increased to levels which would degrade indigenous biota

(5) The concentration of organic materials in marine sediments shall not be increased to levels which would degrade marine life.

(6) Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.

e. Biological Characteristics

(1) Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

(2) The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

(3) The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

f. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

2. The discharge of waste through the San Elijo Ocean Outfall shall not, by itself or jointly with any other discharge, cause violation of the following Basin Plan ocean water quality objectives:

a. The mean annual dissolved oxygen concentration shall not be less than 7.0 mg/L nor shall the minimum dissolved oxygen concentration be reduced below 5.0 mg/L at any time.

b. The pH value shall not be depressed below 7.0 nor raised above 8.6.

3. Toxic Materials

The discharge through the San Elijo Ocean Outfall shall not by itself or jointly with any other discharge, cause the following Ocean Plan water quality objectives to be exceeded in the receiving water upon completion of initial dilution, except that limitations indicated for radioactivity shall apply directly to the undiluted waste effluent.

a. Water Quality Objectives for the Protection of Marine Aquatic Life[19]

Constituent	Units	6 Month Median	Daily Maximum	Instantaneous Maximum
arsenic	ug/L	8	32	80
cadmium	ug/L	1	4	10
chromium (hexavalent)	ug/L	2	8	20
copper	ug/L	3	12	30
lead	ug/L	2	8	20
mercury	ug/L	0.04	0.16	0.4
nickel	ug/L	5	20	50
selenium	ug/L	15	60	150
silver	ug/L	0.45	1.8	4.5
zinc	ug/L	20	80	200
cyanide	mg/L	0.001	0.004	0.010
total chlorine residual	mg/L	0.002	0.008	0.060
ammonia (as N)	mg/L	0.60	2.4	6.0
chronic toxicity	TUc	--	1	--
phenolic compounds (non-chlorinated)	mg/L	0.030	0.12	0.30
chlorinated phenolics	mg/L	0.001	0.004	0.010
endosulfan[8]	ug/L	0.009	0.018	0.027
endrin	ug/L	0.002	0.004	0.006
HCH[9]	ug/L	0.004	0.008	0.012
Radioactivity[10]	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subsection 4, Group 3, Article 1, Section 30253 of the California Code of Regulations.			

b. Water Quality Objectives for the Protection of Human Health – Noncarcinogens[19]

Chemical	Units	30-Day Average
acrolein	ug/L	220
antimony	ug/L	1,200
bis(2-chloroethoxy)methane	ug/L	4.4
bis(2-chloroisopropyl)ether	ug/L	1,200
chlorobenzene	ug/L	570
chromium (III)	ug/L	190,000
di-n-butyl phthalate	ug/L	3,500
dichlorobenzenes[11]	ug/L	5,100
1,1-dichloroethylene	ug/L	7,100
diethyl phthalate	ug/L	33,000
dimethyl phthalate	ug/L	820,000
4,6-dinitro-2-methylphenol	ug/L	220
2,4-dinitrophenol	ug/L	4.0
ethylbenzene	ug/L	4,100
fluoranthene	ug/L	15
hexachlorocyclopentadiene	ug/L	58
isophorone	ug/L	150,000
nitrobenzene	ug/L	4.9
thallium	ug/L	14
toluene	ug/L	85,000
1,1,2,2-tetrachloroethane	ug/L	1,200
tributyltin	ug/L	0.0014
1,1,1-trichloroethane	ug/L	540,000
1,1,2-trichloroethane	ug/L	43,000

c. Water Quality Objectives for the Protection of Human Health – Carcinogens[19]

Chemical	Units	30-Day Average
acrylonitrile	ug/L	0.10
aldrin	ug/L	0.000022
benzene	ug/L	5.9
benzidine	ug/L	0.000069
beryllium	ug/L	0.033
bis(2-chloroethyl)ether	ug/L	0.045
bis(2-ethylhexyl)phthalate	ug/L	3.5
carbon tetrachloride	ug/L	0.90
chlordane[12]	ug/L	0.000023
chloroform	ug/L	130
DDT[13]	ug/L	0.00017
1,4-dichlorobenzene	ug/L	18
3,3-dichlorobenzidine	ug/L	0.0081
1,2-dichloroethane	ug/L	130
dichloromethane	ug/L	450
1,3-dichloropropene	ug/L	8.9
dieldrin	ug/L	0.000040
2,4-dinitrotoluene	ug/L	2.6
1,2-diphenylhydrazine	ug/L	0.16
Halomethanes[14]	ug/L	130
Heptachlor[15]	ug/L	0.00072
hexachlorobenzene	ug/L	0.00021
hexachlorobutadiene	ug/L	14
hexachloroethane	ug/L	2.5
N-nitrosodimethylamine	ug/L	7.3

Chemical	Units	30-Day Average
N-nitrosodiphenylamine	ug/L	2.5
PAHs[16]	ug/L	0.0088
PCBs[17]	ug/L	0.000019
TCDD equivalents[18]	pg/L	0.0039
tetrachloroethylene	ug/L	99
toxaphene	ug/L	0.00021
trichloroethylene	ug/L	27
2,4,6-trichlorophenol	ug/L	0.29
vinyl chloride	ug/L	36

mg/L = milligrams per liter
ug/L = micrograms per liter
ng/L = nanograms per liter
pg/L = picograms per liter
NTU = Nephelometric Turbidity Unit
TUc = toxic units chronic

D. PRETREATMENT REQUIREMENTS

1. The discharger shall be responsible and liable for the performance of all pretreatment requirements contained in 40 CFR Part 403, including any subsequent revisions to 40 CFR Part 403. Where 40 CFR Part 403 or subsequent revisions place mandatory actions upon the discharger, but do not specify a timetable for completion, the discharger shall complete the mandatory actions within six months of the issuance date of this Order, or the effective date of the 40 CFR 403 revisions, whichever comes later. For violations of pretreatment requirements, the discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the USEPA, and/or the Regional Board, as provided in the CWA and/or the Porter-Cologne Water Quality Control Act (CWC).

2. The discharger shall implement and enforce its approved pretreatment program, and all subsequent revisions, which are hereby made an enforceable condition of this Order. The discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the CWA with timely, appropriate, and effective enforcement actions. The discharger shall cause industrial users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements, or in the case of a new industrial user, upon commencement of the discharge.

3. The discharger shall perform the pretreatment functions as required in 40 CFR 403 including, but not limited to:

   a) Implement the necessary legal authorities as provided in 40CFR403.8(f)(1);

   b) Enforce the pretreatment requirements under 40CFR403.5 and 403.6;

   c) Implement the programmatic functions as provided in 40CFR403.8(f)(2); and

   d) Provide the requisite funding and personnel to implement the pretreatment program as provided in 40CFR403.8(f)(3).

4. By March 1, of each year, the discharger shall submit an annual report to the Regional Board; the USEPA Region 9; the State Water Resources Control Board, Division of Water Quality, Regulations Unit; and the San Diego County Department of Health Services, Hazardous Materials Division, describing its pretreatment activities over the previous calendar year. In the event the discharger is not in compliance with any condition or requirement of this Order, or any pretreatment compliance inspection/audit requirements, the discharger shall include the reasons for noncompliance and state how and when it shall comply with such conditions and requirements. The annual report shall contain, but not be limited to, the following information:

   a) A summary of analytical results from representative flow-proportioned 24 hour composite sampling of the discharger's influent and effluent for those pollutants known or suspected to be discharged by industrial users that the USEPA has identified under Section 307(a) of the CWA which are known or suspected to be discharged by industrial users. This will consist of an annual full priority pollutant scan. Wastewater sampling and analysis shall be performed in accordance with the minimum frequency of analysis stated in the Monitoring and Reporting Program of this Order. The discharger shall also provide influent and effluent monitoring data for nonpriority pollutants which the discharger believes may be causing or contributing to interference and/or pass through. The discharger is not required to sample and analyze for asbestos. Sludge sampling and analysis is addressed in the sludge section of this Order. Wastewater sampling and analysis shall be performed in accordance with 40 CFR Part 136.

   b) A discussion of upset, interference, or pass through, if any, at the HARRF which the discharger knows or suspects were caused by industrial users. The discussion shall include the reasons why the incidents occurred, any corrective actions taken, and, if known, the name and address of the industrial user(s) responsible. The discussion shall also include a review of the applicable local pollutant limitations to determine whether any additional limitations or changes to existing limitations, are necessary to

prevent pass through, interference, or noncompliance with sludge disposal requirements.

c) An updated list of the dischargers significant industrial users including their names and addresses, and showing a list of additions, deletions, or name changes keyed to the previous submitted list. The list shall identify the industrial users subject to federal categorical standards by specifying which standards are applicable. The list shall also indicate which significant (non-categorical) industrial users are subject to local limitations.

d) The discharger shall characterize the compliance status of each significant industrial user (SIU) by providing a list or table for the following:

1) Name of SIU and category if subject to categorical standards;

2) Type of wastewater treatment or control processes in place;

3) Number of samples taken by SIU during the year;

4) Number of samples and inspections by discharger during the year;

5) For an SIU subject to discharge requirements for total toxic organics (TTO), whether all required certifications were provided;

6) a list of pretreatment standards (categorical or local) violated during the year, or any other violations;

7) Industries in significant noncompliance(SNC) as defined at 40 CFR Part 403.12(f)(2)(vii) at any time during the year;

8) A summary of enforcement actions or any other actions taken against SIU(s) during the year. Describe the type of action, final compliance date, and the amount of fines and/or penalties collected, if any. Describe any proposed actions for bringing an SIU into compliance; and

9) The name(s) of any SIU(s) required to submit a baseline monitoring report (BMR), and any SIU's currently discharging under a BMR.

e) A brief description of any programs the discharger implements to reduce pollutants from industrial users not classified as SIU's;

f) A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes in the program's administrative structure, local limits, monitoring program, legal authority, enforcement policy, and funding and staffing levels;

g) A summary of the annual pretreatment program budget, including the cost

of pretreatment program functions and equipment purchases;

h) A summary of activities to involve and inform the public of the pretreatment program including a copy of the newspaper notice, if any, required under 40 CFR 403.8(f)(2)(vii);

i) A description of any changes in sludge disposal methods; and

j) A discussion of any concerns not described elsewhere in the annual report.

5. The discharger shall submit a semiannual SIU compliance status report to the Regional Board, the State Water Resources Control Board, and the USEPA. The report shall cover the periods of January 1 through June 30, and July 1 through December 31 and shall be submitted no later than September 1st and March 1st, respectively. The report shall identify:

a) The names and addresses of all SIU's which violated any discharge or reporting requirements during the semi-annual reporting period;

b) A description of the violations including whether the discharge violations were for categorical standards or local limits;

c) A description of the enforcement actions, or other actions taken to remedy the noncompliance; and

d) The status of active enforcement actions, or other actions taken in response to SIU noncompliance identified in previous reports.

6. The discharger shall continue with its implementation of a Nonindustrial Source Control Program consisting of a public education program designed to minimize the entrance of nonindustrial toxic pollutants and pesticides into the sanitary sewer system. The Program shall be reviewed periodically and addressed in the annual report.

E. SLUDGE REQUIREMENTS

1. Management of all solids and sludge must comply with all requirements of CFR Parts 257, 258, 501, and 503, including all monitoring, record-keeping, and reporting requirements. Since the State of California, hence the Regional and State Boards, has not been delegated the authority by the USEPA to implement the sludge program, enforcement of sludge requirements of CFR Part 503 is under USEPA's jurisdiction.

2. All solids and sludge must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Parts 503 and 258, and Title 23 CCR Chapter 15. If the discharger desires to dispose of solids or sludge by a different method, a request for permit modification must be submitted to the USEPA and this

Regional Board 180 days prior to the alternative disposal.

3. Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 25. In the annual self-monitoring report, the discharger shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.

4. All the requirements of 40 CFR 503 and 23 CCR 15 are enforceable by the USEPA and this Regional Board whether or not the requirements are stated in an NPDES permit or any other permit issued to the discharger.

5. The discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.

6. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.

7. The solids and sludge treatment and storage site shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm and protection from the highest possible tidal stage that may occur.

8. The discharge of sewage sludge and solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.

9. The discharger shall submit an annual report to the USEPA and this Regional Board containing monitoring results and pathogen and vector attraction reduction requirements, as specified by 40 CFR 503. The discharger shall also report the quantity of sludge disposed and the disposal method. This self-monitoring report must be postmarked by February 19 of each year and report for the period covering the previous calendar year.

F. PROVISIONS

1. The discharger must comply with all standard provisions, where applicable, as stated in 40 CFR 122.41 (Attachment 3) and Attachment 4.

2. The following sections of 40 CFR (Attachment 5) are incorporated into this permit by reference, and the discharger must comply with these provisions:

a)122.5 Effect of a permit

b)122.21 Application for a permit

c)122.22 Signatories to permit applications and reports

d)122.61 Transfer of permits

e)122.62 Modification or revocation of permits

f)122.63 Minor modifications of permits

g)122.64 Termination of permits

3. This Order may be modified, revoked and reissued, or terminated for causes including, but not limited to, the following:

   a. Violation of any terms or conditions of this Order.

   b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

4. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Executive Officer may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.

5. The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use and disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this Order has not yet been modified to incorporate the requirement.

6. The discharger shall comply with all existing federal and state laws and regulations that apply to its sewage sludge use and disposal practice(s), and with the CWA Section 405(d) and 40 CFR Part 257.

7. This Order does not convey any property rights of any sort or any exclusive privilege. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from its liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue its waste discharge.

8. It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. Upon reduction, loss, or failure of a treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges,

or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of a treatment facility fails, is reduced, or is lost.

9. Supervisors and operators of the discharger's wastewater treatment facilities shall possess a certificate of appropriate grade in accordance with Chapter 14 of Division 4 of Title 23 of the California Code of Regulations.

10. The discharger's wastewater treatment facilities shall be operated and maintained in accordance with the operation and maintenance manual prepared by the discharger through the Clean Water Grant Program.

11. A copy of this Order shall be posted at a prominent location at or near the treatment and disposal facilities, and shall be available to operating personnel at all times.

12. The discharger shall comply with any interim effluent limitations as established by addendum, enforcement action or revised waste discharge requirements that have been or may be adopted by this Regional Board.

13. All proposed new treatment facilities and expansions of existing treatment facilities shall be completely constructed and operable prior to initiation of the discharge from the new or expanded facilities. The discharger shall submit a certification report for each new treatment facility, expansion of an existing treatment facility, and re-rating of an existing treatment facility. For new treatment facilities and expansions, the certification report shall be prepared by the design engineer. For re-ratings, the certification report shall be prepared by the engineer who evaluated the treatment facility capacity. The certification report shall:

    a. Identify the design capacity of the treatment facility;

    b. Certify the adequacy of each component of the treatment facility; and

    c. Contain a requirement-by-requirement analysis, based on acceptable engineering practices, of how the process and physical design of the facility will ensure compliance with this Order.

    The signature and engineering license number of the engineer preparing the certification report shall be affixed to the report. The certification report, should, if possible, be submitted prior to beginning construction. The discharger shall not initiate a discharge from a new treatment facility or initiate a discharge from an existing treatment facility at a 30-day average dry weather flowrate in excess of its previously approved design capacity until:

    a. The certification report is received by the Executive Officer;

    b. The Executive Officer has received written notification of the completion of construction (new treatment facilities and expansions

only);

c. An inspection of the plant has been made by the Regional Board staff (new treatment facilities and expansions only); and

d. The Executive Officer has provided the discharger with written authorization to discharge at a 30-day average dry weather flowrate not to exceed the revised design capacity.

14. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.

15. All analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Sufficient sampling and analysis shall be conducted to determine compliance.

16. Compliance based on a single sample analysis should be determined where appropriate as described below.

a. When a calculated effluent limitation is greater than or equal to the PQL (defined below), compliance shall be determined based on the calculated effluent limitation and either single or multiple sample analyses.

b. When the calculated effluent limitation is below the PQL, compliance determinations based on analysis of a single sample shall only be undertaken if the concentration of the constituent of concern in the sample is greater than or equal to the PQL.

c. When the calculated effluent limitation is below the PQL and recurrent analytical responses between the PQL and the calculated limit occur, compliance shall be determined by statistical analysis of multiple samples.

17. Published values for MDLs (defined below) and PQLs should be used except where revised MDLs and PQLs are available from recent laboratory performance evaluations, in which case the revised MDLs and PQLs should be used. Where published values are not available, the Executive Officer will determine appropriate values based on available information, including information submitted by the discharger upon request of the Executive Officer.

a. The Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40

CFR Part 136 Appendix B.

b. The Practical Quantitation Level (PQL) is the lowest concentration of a substance which can be consistently determined within +/-20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL for carcinogens is the MDL x 5, and for noncarcinogens is the MDL x 10.

18. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g. PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.

19. The 6-month median effluent concentration limitation shall apply as a moving median of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred. The 6-month median receiving water limitation shall apply as a moving median of daily values for any 180-day period.

20. The 30-day average effluent limitation shall be the moving arithmetic mean of daily concentrations over the specified 30-day period.

21. The 7-day average shall be the moving arithmetic mean of daily concentrations over the specified 7-day period.

22. The daily maximum effluent concentration limitation shall apply to flow weighted 24-hour composite samples. The daily maximum receiving water limitation shall apply to grab sample determinations.

23. The instantaneous maximum effluent concentration limitation shall apply to grab sample determinations. The instantaneous maximum receiving water limitation shall apply to grab sample determinations.

24. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{mass emission rate (lb/Day)} = 8.34 \times Q \times C$$

in which Q and C are the flow rate in MGallons/Day and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor. If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

25. The geometric mean used for determining compliance with bacterial

standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \ldots \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL) found on each day of sampling.

26. Compliance with the Acute Toxicity limitation in Discharge Specification B.1.a. of this Order shall be determined using an established protocol, e.g., American Society for Testing Materials (ASTM), USEPA, American Public Health Association, or State Board. Acute Toxicity (TUa) shall be expressed in Toxic Units Acute (TUa), where:

$$TUa = \frac{100}{\text{96-hour } LC_{50}}$$

Where LC_{50} is the Lethal Concentration 50% and the percent waste giving 50% survival of test organisms. LC_{50} shall be determined by static or continuous flow bioassay techniques using standard test species. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC_{50} may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC_{50} due to greater than 50% survival of the test species in 100% waste, the toxicity concentration shall be calculated by the following:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where S is the percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

27. Compliance with the Chronic Toxicity effluent limitation established in Discharge Specification No. B.1.b of this Order shall be determined using critical life stage toxicity tests. Chronic Toxicity (TUc) shall be expressed as Toxic Units Chronic (TUc), where:

$$TUc = \frac{100}{NOEL}$$

where NOEL is the No Observed Effect Level and is expressed as the maximum percent of effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed below.

A minimum of three test species with approved test protocols shall be used to

measure compliance with the chronic toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring may be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

The tests specified in the July 1997 Ocean Plan shall be used to measure TUc. Other tests may be added to the list when approved by the SWRCB.

28. If toxicity testing results show a violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1 of this Order, the discharger shall:

    a. Take all reasonable measures necessary to immediately minimize toxicity; and

    b. Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.

    If the Executive Officer determines that toxicity testing shows consistent violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1. of this Order, the discharger shall conduct a TRE that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the discharger shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specification B.1 of this Order.

    Within fourteen days of completion of the TRE, the discharger shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this Order and prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Executive Officer.

29. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN (most probable number). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method determined by the Regional Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Regional Board to be appropriate.

30. As used in this Order, waste includes a discharger's total discharge, of whatever origin, i.e. gross, not net, discharge.

31. Reduction of natural light may be determined by the Regional Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Board.

32. The discharger shall maintain a Sewer Overflow Prevention Plan (SOPP) for the Escondido Land Outfall (ELO) and the service area of the Hale Avenue Resource Recovery Facility (HARRF) in an up-to-date condition and shall amend the SOPP whenever there is a change (e.g. in the design, construction, operation, or maintenance of the sewerage system or sewerage facilities) which materially affects the potential for sewer overflows. The discharger shall review and amend the SOPP as appropriate after each sewer overflow from the ELO or in the service area of the HARRF. The SOPP and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SOPP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SOPP is readily available to sewerage system personnel at all times and that sewerage system personnel are familiar with it.

33. The discharger shall maintain a Sewer Overflow Response Plan (SORP) for the ELO in an up-to-date condition and shall amend the SORP as necessary. The discharger shall review and amend the SORP as appropriate after each sewer overflow from the ELO or in the service area of the HARRF. The SORP, and any amendments thereto, shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. The discharger shall submit the SORP and any amendments thereto to the Executive Officer upon request of the Executive Officer. The discharger shall ensure that the up-to-date SORP is readily available to sewerage system personnel at all times and that sewerage system personnel are familiar with it.

34. No later than 10 months after the adoption of this Order, the discharger shall submit a written report to the Executive Officer addressing the following:

    a. Most current report on the SEOO capacity.

    b. The discharger's best estimate of when the average daily dry-weather flow will equal or exceed the SEOO capacity.

    c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the SEOO and/or to control the flowrate before the flowrate is equal to the current outfall capacity.

    d. The report must be signed, and agreed upon by each of the parties discharging through the SEOO.

35. No later than 90 days after the adoption of this Order, the discharger shall submit a written report to the Executive Officer in conformance with Reporting Requirement G.8 of this Order.

G. REPORTING REQUIREMENTS

1. The discharger must comply with standard monitoring and reporting requirements, where applicable, as stated in 40 CFR 122.41 (Attachment 3) and Attachment 4.

2. This Order expires November 10, 2004. If the discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain new waste discharge requirements. The discharger must submit a full and complete Report of Waste Discharge in accordance with Title 23 of the California Code of Regulations, to the Executive Officer, not later than 180 days in advance of the expiration date of this Order, as application for issuance of new waste discharge requirements. Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the Discharger shall submit a technical report describing changes including, but not limited to, the following:

    a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.

    b. Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.

    c. Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.

    d. Increase in flow beyond that specified in the waste discharge requirements.

    e. Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC 13372, 13376, 13264, 23 CCR 2210]

    f. Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.

    g. Any new discharge of pollutants or new potential pollutant source.

ii. Other circumstances which could result in a material change in the character, amount, or location of discharges. [CWC 13372, 13264,23 CCR 2210]

3. Pursuant to State Board Order No. WQ 84-7, the discharger shall submit with its Report of Waste Discharge for reissuance of its NPDES permit, sufficient information to justify why any effluent proposed to be discharged to the ocean is not being reclaimed for beneficial use.

4. Whenever a receiving water sample is found to contain levels of bacteria which exceed bacterial water quality objectives specified in Receiving Water Limitation C.1.a.(1) of this Order, the discharger shall immediately notify the County of San Diego Department of Environmental Health Services and post signs prohibiting body contact with the water in all areas affected by the contamination.

5. The discharger shall report sewer overflow events in accordance with the following procedures:

   a. All sewer overflow events that occur in the service area of the HARRF shall be reported to the Regional Board and the County of San Diego Department of Environmental Health Services. A sewer overflow event is a discharge of treated or untreated wastewater at a location not authorized by waste discharge requirements and/or NPDES permit which results from a pump station failure, sewer line break, obstruction, surcharge, or any other circumstance.

   b. If a sewer overflow event results in a discharge to surface waters:

      (1) The sewer overflow event shall be reported to the Regional Board and the County of San Diego Environmental Health Services by telephone within 24 hours of the time the discharger becomes aware of the sewer overflow event. The telephone report shall include only the information specified by Item Nos. 1 through 5, 8, 12 A, 12 B and 13 contained in the Sewer Overflow Report (SOR) form supplied by the Regional Board.

      (2) A SOR form (completed in accordance with the instructions), as well as any additional pertinent information, shall be submitted to the Regional Board no later than five days following the starting date of the sewer overflow event.

   c. If a sewer overflow event does not result in a discharge to surface waters:

      (1) No telephone report is required.

(2) An SOR form (completed in accordance with the instructions), as well as any additional pertinent information, shall be submitted to the Regional Board no later than five days following the starting date of the sewer overflow event.

6. The discharger shall provide adequate notice to the Executive Officer of the following:

   a. Any new introduction of pollutants into the discharger's treatment works from an indirect discharger which would be subject to Section 301 or 306 of the CWA if it were directly discharging those pollutants;

   b. Any substantial change in the volume or character of pollutants being introduced into the discharger's treatment works by a source introducing pollutants into the treatment works at the time of issuance of this Order; and

   c. For purposes of this paragraph, adequate notice shall include information on:

      (1) The quality and quantity of effluent introduced into the POTW, and

      (2) Any anticipated impact of the change on the quantity or quality of effluent and/or sludge to be discharged from the POTW.

7. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

8. The discharger shall submit a written report to the Executive Officer within 90 days after the average dry weather influent flowrate for any 30-day period equals or exceeds 75 percent of the design capacity of the waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

   a. Average daily flow for the 30-day period, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

   b. The discharger's best estimate of when the average daily dry-weather flowrate will equal or exceed the design capacity of the facilities.

   c. The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities, and/or control the flowrate before the waste

flowrate exceeds the capacity of present units.

9. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the California Regional Water Quality Control Board, San Diego Region. As required by the CWA, Reports of Waste Discharge, this Order, and effluent data shall not be considered confidential.

10. The discharger shall submit reports and provide notifications to the Regional Board and other agencies as specified in this Order. These other agencies include USEPA, and the San Diego County Department of Health Services. Reports shall be submitted and notifications shall be made to:

    a. Executive Officer
    California Regional Water Quality Control Board
    San Diego Region
    9771 Clairemont Mesa Boulevard, Suite A
    San Diego, California 92124-1324
    Phone - (858) 467-2952
    Fax - (858) 571-6972

    b. Regional Administrator
    U.S. Environmental Protection Agency
    Region 9
    75 Hawthorne Street
    San Francisco, California 94105

    c. Environmental Health Services Division
    Department of Health Services
    County of San Diego
    P.O. Box 85261
    San Diego, California 92138-5261
    Phone - (619) 338-2222
    Fax - (619) 338-2174

H. NOTIFICATIONS

1. California Water Code Section 13263(g) states:

> No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights.

2. The discharger is held accountable for responsibilities, liabilities, legal actions, and penalties as stated in Attachment 4 and Attachment 5 of this Order.

3. This Order shall become effective 10 days after the date of its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

4. This Order supersedes Order No. 94-104 when this Order becomes effective.

ORDER NO. 99-72 ENDNOTES

[1] Conditions to be met for the discharge of 17.5 MGallons/Day are specified in Addendum No. 2 of Order 88-04.

[2] Secondary treatment is defined by the USEPA Administrator in the federal regulations (40 CFR Part 133.100 to 40 CFR Part 133.105) in terms of three parameters: 5-day biochemical oxygen demand (BOD_5), total suspended solids (TSS), and pH. Federal regulations allow substitution of 5-day carbonaceous biochemical oxygen demand ($CBOD_5$) limitations for BOD_5 limitations.

[3] Effluent concentration limitations are specified in the 1997 Ocean Plan, Table A. Mass emission limitations, where applicable, were determined using procedures outlined in the Ocean Plan, Equation 2, and a flow rate of 16.5 MGallons/Day.

[4] Effluent concentration and mass emission rate limitations were determined using the procedures outlined in the 1997 Ocean Plan, an initial dilution of 220, and a flow rate of 16.5 MGallons/Day.

[5] The discharger may, at its option, meet this limitation as a total chromium limitation.

[6] If the discharger can demonstrate to the satisfaction of the Regional Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by Standard Methods 412 F, G, and H (Standard Methods for the Examination of Water and Wastewater, Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution Control Federation, most recent edition.)

[7] The effluent concentration and mass emission rate limitations for total chlorine residual are based on a continuous discharge of chlorine. Effluent concentration limitations for total chlorine residual, which are applicable to intermittent discharges not exceeding 2 hours, shall be determined through the use of the following equations:

$$\log Co = -0.43 (\log x) + 1.8$$
$$Ce = Co + Dm (Co - Cs)$$

where:

- Co = the concentration (in ug/L) to be met at the completion of initial dilution
- x = the duration of uninterrupted chlorine discharge in minutes
- Ce = the effluent concentration limitation ug/L to apply when chlorine is being intermittently discharged
- Dm = the minimum probable initial dilution
- Cs = the background seawater concentration = 0

[8] Endosulfan shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

[9] HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

[10] The 1997 Ocean Plan refers to limits specified in Title 17, Division 5, Chapter 4, Group 3, Article 3, Section 32069 of the California Code of Regulations. This section has been repealed, and substituted with limitations set forth in this Order.

[11] Dichlorobenzenes shall mean the sum of 1,2- and 1,3-dichlorobenzene.

[12] Chlordane shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

[13] DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

[14] Halomethanes shall mean the sum of bromoform, bromomethane (methyl bromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.

[15] Heptachlor shall mean the sum of heptachlor and heptachlor epoxide.

[16] PAHs(polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

[17] PCBs(polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

[18] TCDD EQUIVALENTS shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

Isomer Group	Toxicity Equivalence Factor
2,3,7,8-tetra CDD	1.0
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

[19] 1997 Ocean Plan, Table B, Water Quality Objectives

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 99-72
NPDES PERMIT NO. CA0107981
MONITORING AND REPORTING PROGRAM
FOR THE CITY OF ESCONDIDO
HALE AVENUE RESOURCE RECOVERY FACILITY

DISCHARGE TO THE PACIFIC OCEAN
VIA THE ESCONDIDO LAND OUTFALL AND
THE SAN ELIJO OCEAN OUTFALL

This Monitoring and Reporting Program Supersedes Technical Change Order No. 1 to Order 94-104 in its entirety. This Monitoring and Reporting program shall become effective with the adoption of Order No. 99-72.

I. Purpose

This monitoring program is intended to:

- Document short-term and long-term effects of the discharge on receiving waters, sediments, biota, and beneficial uses of the receiving water.
- Determine compliance with NPDES permit terms and conditions.
- Assess the effectiveness of industrial pretreatment and toxic control programs.

The monitoring data will be used to determine compliance with water quality standards.

II. Monitoring Provisions

1. Samples and measurements taken as required herein shall be representative of the volume and nature[1] of the monitored discharge. All samples shall be taken at the monitoring points specified in this monitoring program and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer. Samples shall be collected at times representative of "worse case" conditions with respect to compliance with the requirements of Order No. 99-72.

2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device.

Devices selected shall be capable of measuring flows with a maximum deviation of less than ±10% from true discharge rates throughout the range of expected discharge volumes.

3. Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40 of the Code of Federal Regulations Part 136 (40 CFR 136), Guidelines Establishing Test Procedures for the Analysis of Pollutants, as amended, unless otherwise specified for sludge in 40 CFR 503, or unless other test procedures have been specified in Order No. 99-72 and/ or in this monitoring and reporting program.

4. If the discharger monitors any pollutants more frequently than required by Order No. 99-72 or by this monitoring and reporting program, using test procedures approved under 40 CFR Part 136, or as specified in Order No. 99-72 and this monitoring and reporting program, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

5. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by Order No. 99-72 and this monitoring and reporting program, and records of all data used to complete the application for Order No. 99-72. Records shall be maintained for a minimum of 5 years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer or the USEPA.

6. Records of monitoring information shall include:

   a. The date, exact location, and time of sampling or measurements;

   b. The name(s) of individual(s) who performed the sampling or measurements;

   c. The date(s) analyses were performed;

   d. The name(s) of the laboratory and individual(s) who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analyses.

7. Calculations for all limitations that receive averaging of measurements shall utilize an arithmetic mean unless otherwise specified in Order 99-72 or this monitoring and reporting program.

8. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.

9. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board Executive Officer.

10. The discharger shall have, and implement, an acceptable written quality assurance (QA) plan for laboratory analyses. An annual report shall be submitted by February 1st of each year that summarizes the QA activities for the previous year. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples, or at least one sample per month, whichever is more frequent. A similar frequency shall be maintained for analyzing spiked samples. When requested by the USEPA or the Regional Board, the discharger will participate in the NPDES discharge monitoring report QA performance study. The discharger shall have a success rate equal to or greater than 80 percent.

11. The discharger shall report all instances of noncompliance not reported under Reporting Requirement G.5 of Order No. 99-72 at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement G.5 of Order No. 99-72.

12. By February 1st of each year, the discharger shall submit an annual report to the Regional Board and USEPA Region 9 that contains tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed to bring the discharge into full compliance with the requirements of Order No. 99-72 and this monitoring and reporting program.

13. Laboratory method detection limits (MDLs) and practical quantitation levels (PQLs) shall be identified for each constituent in the matrix being analyzed with all reported analytical data. Acceptance of data shall be based on demonstrated laboratory performance.

14. Monitoring results shall be reported at intervals and in a manner specified in Order No. 99-72 and in this monitoring and reporting program. Unless otherwise specified, monitoring reports shall be submitted to the Regional Board and to USEPA Region 9 according to the following schedule:

Monitoring Frequency	Reporting Period	Report Due
Continuous, Daily, Weekly, or Monthly	All	By the first day of the second month after the month of sampling.
Quarterly	Jan.-March	May 1
	April-June	August 1
	July-September	November 1
	October-December	February 1
Semiannually	January-June	August 1
	July-December	February 1
Annually	January-December	February 1

Once every 5 years	---	February 1

III. Influent Monitoring

Influent monitoring is intended to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Assess treatment plant performance.
- Assess the effectiveness of an Industrial Pretreatment Program and a Toxic Control Program.

Sampling stations shall be established at each point of inflow to all treatment plants and shall be located upstream of any in-plant return flows, and where representative samples of the influent can be obtained. Influent samples shall be collected on the same day as, and shortly before the collection of effluent samples.

During periods when no effluent from a particular treatment plant is discharged to the Pacific Ocean, no influent monitoring, except for flowrate monitoring, is required at that treatment plant.

The following shall constitute the influent monitoring program:

Parameter	Unit	Type of Sample[1]	Minimum Frequency
Flowrate	MGallons/Day	recorder/ totalizer	continuous
$CBOD_5$ @ 20°C	mg/L	24-hour composite	weekly
Suspended Solids	mg/L	24-hour composite	weekly

IV. Effluent Monitoring

Effluent monitoring is intended to:

- Determine compliance with NPDES permit conditions and water quality standards.
- Identify operational problems in order to improve plant performance.
- Provide information on waste characteristics and flows for use in interpreting water quality and biological data.

The effluent sampling station shall be located downstream of any in-plant return flows, and disinfection units, where representative samples of the effluent discharged through the ocean outfall can be obtained.

During periods where no effluent from a particular treatment plant is discharged to the Pacific Ocean, no effluent monitoring, except for flowrate monitoring, is required at that treatment plant.

The following shall constitute the effluent monitoring program:

Parameter	Unit	Type of Sample[1]	Minimum Frequency
Flowrate	MGallons/Day	recorder/totalizer	continuous
$CBOD_5$ @ 20°C	mg/L	24-hour composite	daily[2]
BOD_5	mg/L	24-hour composite	monthly
Suspended Solids	mg/L	24-hour composite	daily[2]
pH	pH units	grab	daily[2]
Oil and Grease	mg/L	grab	monthly[3]
Settleable Solids	mL/L	grab	daily[2]
Turbidity	NTU	24-hour composite	weekly[3]
Acute Toxicity	TUa	24-hour composite	monthly
Dissolved Oxygen	mg/L	grab	weekly
Temperature	°F	--	weekly
Arsenic	ug/L	24-hour composite	quarterly[3,4]
Cadmium	ug/L	24-hour composite	quarterly [3,4]
Chromium(hexavalent)	ug/L	24-hour composite	quarterly[3,4,5]
Copper	ug/L	24-hour composite	quarterly [3,4]
Lead	ug/L	24-hour composite	quarterly [3,4]
Mercury	ug/L	24-hour composite	quarterly [3,4]
Nickel	ug/L	24-hour composite	quarterly [3,4]
Selenium	ug/L	24-hour composite	quarterly [3,4]
Silver	ug/L	24-hour composite	quarterly [3,4]
Zinc	ug/L	24-hour composite	quarterly [3,4]
Cyanide	mg/L	24-hour composite	quarterly [3,4]
Total Residual Cl	mg/L	grab	daily[6]
Ammonia (as N)	mg/L	24-hour composite	monthly[3]
Chronic Toxicity	TUc	24-hour composite	monthly[7]
Phenolic Compounds (nonchlorinated)	mg/L	24-hour composite	quarterly [3,4]
Phenolic Compounds (chlorinated)	mg/L	24-hour composite	quarterly [3,4]
Endosulfan	ug/L	24-hour composite	quarterly [3,4]
Endrin	ug/L	24-hour composite	quarterly [3,4]
HCH	ug/L	24-hour composite	quarterly [3,4]
Radioactivity	pCi/L	24-hour composite	quarterly [3]
Acrolein	ug/L	grab	semiannually[3]
Antimony	ug/L	24-hour composite	semiannually[3]
bis(2-chloroethoxy) methane	ug/L	grab	semiannually[3]
bis(2-chlorroisopropyl) ether	ug/L	grab	semiannually[3]
chlorobenzene	ug/L	grab	semiannually[3]
chromium (III)	ug/L	24-hour composite	semiannually[3]
di-n-butyl phthalate	ug/L	grab	semiannually[3]
dichlorobenzenes	ug/L	grab	semiannually[3]
1,1-dichloroethylene	ug/L	grab	semiannually[3]
diethyl phthalate	ug/L	grab	semiannually[3]
dimethyl phthalate	ug/L	grab	semiannually[3]
4,6-dinitro-2-methylphenol	ug/L	grab	semiannually[3]
2,4 dinitrophenol	ug/L	grab	semiannually[3]

Parameter	Unit	Type of Sample[1]	Minimum Frequency
ethylbenzene	ug/L	grab	semiannually[3]
fluoranthene	ug/L	grab	semiannually[3]
hexacyclopentadiene	ug/L	grab	semiannually[3]
isophorone	ug/L	grab	semiannually[3]
nitrobenzene	ug/L	grab	semiannually[3]
thallium	ug/L	24-hour composite	semiannually[3]
toluene	ug/L	grab	semiannually[3]
1,1,2,2-tetrachloro-ethane	ug/L	grab	semiannually[3]
tributyltin	ug/L	24-hour composite	semiannually[3]
1,1,1-trichloroethane	ug/L	grab	semiannually[3]
1,1,2-trichloroehtane	ug/L	grab	semiannually[3]
acrylonitrile	ug/L	grab	semiannually[3]
aldrin	ug/L	grab	semiannually[3]
benzene	ug/L	grab	semiannually[3]
benzidine	ug/L	grab	semiannually[3]
beryllium	ug/L	24-hour composite	semiannually[3]
bis(2-chloroethyl) ether	ug/L	grab	semiannually[3]
bis(2-ehtylhexyl) phthalate	ug/L	grab	semiannually[3]
carbon tetrachloride	ug/L	grab	semiannually[3]
chlordane	ug/L	grab	semiannually[3]
chloroform	ug/L	grab	semiannually[3]
DDT	ug/L	grab	semiannually[3]
1,4-dichlorobenzene	ug/L	grab	semiannually[3]
3,3-dichlorobenzidine	ug/L	grab	semiannually[3]
1,2-dichloroethane	ug/L	grab	semiannually[3]
dichloromethane	ug/L	grab	semiannually[3]
1,3-dichloropropene	ug/L	grab	semiannually[3]
dieldrin	ug/L	grab	semiannually[3]
2,4-dinitrotoluene	ug/L	grab	semiannually[3]
1,2-diphenylhydrazine	ug/L	grab	semiannually[3]
halomethanes	ug/L	grab	semiannually[3]
heptachlor	ug/L	grab	semiannually[3]
hexachlorobenzene	ug/L	grab	semiannually[3]
hexachlorobutadiene	ug/L	grab	semiannually[3]
hexachloroethane	ug/L	grab	semiannually[3]
N-nitrosodimethyl-amine	ug/L	grab	semiannually[3]
N-nitrosodiphenyl-amine	ug/L	grab	semiannually[3]
PAHs	ug/L	grab	semiannually[3]
PCBs	ng/L	grab	semiannually[3]
TCDD equivalents	pg/L	grab	semiannually[8,3]
Tetrachloroethylene	ug/L	grab	semiannually[3]
Toxaphene	ug/L	grab	semiannually[3]
Trichloroethylene	ug/L	grab	semiannually[3]
2,4,6-trichlorophenol	ug/L	grab	semiannually[3]
vinyl chloride	ug/L	grab	semiannually[3]

V. Solids Monitoring

Solids monitoring is intended to:

- Assess the effectiveness of a pretreatment program.
- Maintain a record of the volume of solids generated and disposal sites used.
- Evaluate the character of sludge to ensure that appropriate disposal methods are employed.

A report identifying the volume of screenings, sludges, grit, and other solids removed from the wastewater and the point(s) at which these wastes were disposed of shall be submitted annually. A copy of all annual reports required by 40 CFR 503 shall be submitted to the Regional Board at the same time those reports are submitted to the USEPA.

VI. Receiving Water Monitoring

To determine compliance with water quality standards, the receiving water quality monitoring program must document conditions in the vicinity of the "Zone of Initial Dilution" (ZID) boundary, at reference stations, and at areas beyond the ZID where discharge impacts might reasonably be expected. Monitoring must reflect conditions during all critical environmental periods.

Receiving water and sediment monitoring in the vicinity of the San Elijo Ocean Outfall (SEOO) shall be conducted as specified below. Station location, sampling, sample preservation and analyses, when not specified, shall be by methods approved by the Executive Officer. The monitoring program may be modified by the Executive Officer at any time.

The receiving water and sediment monitoring program for the SEOO may be conducted jointly with other dischargers to the SEOO if the discharger so chooses. Receiving water and sediment monitoring stations shall be located and numbered as follows:

Monitoring Station Locations

Station	Description
	Surf Zone Stations
S1	Surf zone, 8,000' south of the outfall.
S2	Surf zone, 4,500' south of the outfall.
S3	Surf zone, 2,500' south of the outfall.
S4	Surf zone, 500' south of the outfall.
S5	Surf zone, 500' north of the outfall.
S6	Surf zone, 2,200' north of the outfall.
S7	Surf zone, 4,000' north of the outfall.
	Nearshore Stations
N1	Opposite S1, 3,000 feet seaward, MLLW.
N2	Opposite S2, 3,000 feet seaward, MLLW.

N3	Opposite S3, 3,000 feet seaward, MLLW.
N4	Opposite S4, 3,000 feet seaward, MLLW.
N5	Opposite S5, 3,000 feet seaward, MLLW.
N6	Opposite S6, 3,000 feet seaward, MLLW.
N7	Opposite S7, 3,000 feet seaward, MLLW.
	Offshore Stations
A14S	At the 120' depth contour, 14,000' south of the outfall.
A4S	At the 120' depth contour, 4,000' south of the outfall.
A2S	At the 120' depth contour, 2,000' south of the outfall.
A1S	At the 120' depth contour, 1,000' south of the outfall.
A0.5S	At the 120' depth contour, 500' south of the outfall.
A1N	At the 120' depth contour, 1,000' north of the outfall.
A2N	At the 120' depth contour, 2,000' north of the outfall.
	Biological Transects
T0.5S	At the 20, 40, 60,and 80 foot depth contours along the transect located 500 feet downcoast of and parallel to the outfall.
T4S	At the 20, 40, 60,and 80 foot depth contours along the transect located 4,000 feet downcoast of and parallel to the outfall.
T14S	At the 20, 40, 60,and 80 foot depth contours along the transect located 14,000 feet downcoast of and parallel to the outfall.

It is recommended that stations be located using a land-based microwave positioning system, such as Mini-Ranger or trisponder, or a satellite positioning system such as Global Positioning System (GPS). The high levels of accuracy and precision afforded by this type of positioning system will ensure that stations are properly located with respect to the ZID. If an alternate navigation system (e.g. Loran C) is proposed, its accuracy should be compared to that of the systems recommended herein, and any compromises in accuracy should be justified.

Monitoring station locations may be modified with the approval of the Executive Officer.

A. SURF ZONE WATER QUALITY MONITORING

Surf zone monitoring is intended to assess bacteriological conditions in areas used for body-contact activities (e.g., swimming); and to assess aesthetic conditions for general recreational uses (e.g., picnicking).

All "surf zone stations" shall be monitored as follows:

1. Grab samples shall be collected and analyzed for total and fecal coliforms, and enterococcus at a minimum frequency of once per week from May 1 through October 31, and at a minimum frequency of once every other week from November 1, through April 30 of each year.

2. At the same time samples are collected from "surf zone stations" the following information shall be recorded: observation of wind (direction and speed), weather (e.g., cloudy, sunny, or rainy), current (e.g., direction), and tidal conditions; observations of water color, discoloration, oil and grease, turbidity, odor, and materials of sewage origin in the water or on

the beach; water temperature (°F); and status of San Elijo Lagoon mouth (e.g. open, closed, flow).

B. NEARSHORE WATER QUALITY MONITORING

Nearshore monitoring is intended to assess bacteriological conditions in areas used for body-contact activities (e.g. scuba diving) and where shellfish and/or kelp may be harvested; and to assess aesthetic conditions for general boating and recreational uses.

All "nearshore stations" shall be monitored as follows:

1. Reduced Monitoring
If the Executive Officer determines that the effluent at all times complies with Discharge Specifications B.1 and B.3 of Order No. 99-72, only the reduced nearshore water quality monitoring specified below is required.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	--	--	Monthly
Total and Fecal Coliforms,	#/100mL	Grab[9]	Monthly
Enterococcus[10]	#/100mL	Grab[9]	Monthly

2. Intensive Monitoring
The intensive nearshore water quality monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The intensive nearshore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1 and B.3 of Order No. 99-72.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	--	--	Monthly
Total and Fecal Coliforms,	#/100mL	Grab[11]	Monthly
Enterococcus	#/100mL	Grab[11]	Monthly

C. OFFSHORE WATER QUALITY MONITORING

Offshore monitoring is intended to determine compliance with the Ocean Plan; and to determine if the applicant's discharge causes significant impacts on the water quality within the ZID and beyond the ZID as compared to reference areas.

All "offshore stations" shall be monitored as follows:

1. Reduced Monitoring

If the Executive Officer determines that the effluent at all times complies with Discharge Specifications B.1 and B.3 of Order No. 99-72, only the reduced offshore water quality monitoring specified below is required.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	--	--	Monthly
Total and Fecal Coliforms,	#/100mL	Grab[11]	Monthly
Enterococcus[10]	#/100mL	Grab[11]	Monthly

2. Intensive Monitoring

The intensive water quality monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The intensive offshore water quality monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1 and B.3 of Order No. 99-72.

Determination	Units	Type of Sample	Minimum Frequency
Visual Observations	--	--	Monthly
Total and Fecal Coliforms,	#/100mL	Grab[11]	Monthly
Enterococcus	#/100mL	Grab[11]	Monthly
Temperature	°F	Grab[12]	Monthly
Dissolved Oxygen	mg/L	Grab[12]	Monthly
Light Transmittance	%	Instrument[12]	Monthly
pH	pH units	Grab[9]	Annually

D. BENTHIC MONITORING

Benthic monitoring is intended to assess the status of the benthic community, and to evaluate the physical and chemical quality of the sediments.

The intensive monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The sediment monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specifications B.1 and B.3 of Order No. 99-72. Sediment monitoring shall be conducted at all "offshore stations".

1. Sediment Characteristics

Analyses shall be performed on the upper two inches of core.

Determination	Units	Type of Sample	Minimum Frequency
Sulfides	mg/kg	Core	Semiannually

Total Chlorinated Hydrocarbons	mg/kg	Core	Semiannually
BOD_5	mg/kg	Core	Semiannually
COD_5	mg/kg	Core	Semiannually
Particle Size Distribution	--	Core	Semiannually
Arsenic	mg/kg	Core	Annually
Cadmium	mg/kg	Core	Annually
Total Chromium	mg/kg	Core	Annually
Copper	mg/kg	Core	Annually
Lead	mg/kg	Core	Annually
Mercury	mg/kg	Core	Annually
Nickel	mg/kg	Core	Annually
Silver	mg/kg	Core	Annually
Zinc	mg/kg	Core	Annually
Cyanide	mg/kg	Core	Annually
Phenolic Compounds	mg/kg	Core	Annually
Radioactivity	pCi/kg	Core	Annually

2. Infauna

Samples are to be collected with a Paterson, Smith-McIntyre, or orange-peel-type dredge, having an open sampling area of not less than 124 square inches and a sediment capacity of not less than 210 cubic inches. The sediment shall be sifted through a one-millimeter mesh screen and all organisms shall be identified to as low a taxon as possible.

Determination	Units	Minimum Frequency
Benthic Biota	Identification and Enumeration	3 Grabs Semiannually

E. ADDITIONAL BIOLOGICAL MONITORING

1. Demersal Fish and Macroinvertebrates

The intensive monitoring specified below is required during the 12-month period beginning May 1, 2003 through April 30, 2004, and must be submitted by May 31, 2004. This monitoring data will assist Regional Board staff in the evaluation of the Report of Waste Discharge required by Reporting Requirement G.2 to be submitted by May 10, 2004, 180 days prior to the Order's expiration date of November 10, 2004. The biological transect monitoring specified below is also required if the Executive Officer determines that the effluent does not at all times comply with Discharge Specification B.1, and B.3 of Order No. 99-72.

Determination	Units	Type of Sample[13]	Minimum Frequency
Biological Transects	Identification and Enumeration	***	Annually

In rocky or cobble areas, a 30-meter band transect, one meter wide shall established on the ocean bottom. Operations at each underwater station shall include: (1) Water temperature (may be measured from a boat), estimated visibility and pelagic macrobiota at each 10-foot depth increment throughout the water column and at the bottom recorded; (2)

general bottom description recorded; (3) enumeration by estimate of the larger plants and animals in the band transect area recorded; (4) representative photographic record of sampled area taken; and (5) within each band, three one-quarter meter square areas shall be randomly selected and all macroscopic plant and animal life shall be identified to as low a taxon as possible and measured.

For both epifauna and infauna, size frequency and distribution shall be shown for at least the three numerically largest populations identified to the lowest possible taxon and appropriate graphs showing the relationship between species frequency and population shall be plotted from each sample.

2. Kelp Bed Monitoring

Kelp bed monitoring is intended to assess the extent to which the discharge of wastes may affect the areal extent and health of coastal kelp beds.

The discharger shall participate with other ocean dischargers in the San Diego Region in an annual regional kelp bed photographic survey. Kelp beds shall be monitored annually by means of vertical aerial infrared photography to determine the maximum areal extent of the region's coastal kelp beds within the calendar year. Surveys shall be conducted as close as possible to the time when kelp bed canopies cover the greatest area. The entire San Diego Region coastline, from the international boundary to the San Diego Region/ Santa Ana Region boundary, shall be photographed on the same day.

The images produced by the surveys shall be presented in the form of a 1:24,000 scale photo-mosaic of the entire San Diego Region coastline. Onshore reference points, locations of all ocean outfalls and diffusers, and the 30-foot (MLLW) and 60-foot (MLLW) depth contours shall be shown.

The areal extent of the various kelp beds photographed in each survey shall be compared to that noted in surveys of previous years. Any significant losses which persist for more than one year shall be investigated by divers to determine the probable reason for the loss.

I, John H. Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of Order No. 99-72 adopted by the California Regional Water Quality Control Board, San Diego Region, on November 10, 1999.

JOHN H. ROBERTUS
Executive Officer

MONITORING AND REPORTING PROGRAM ENDNOTES

1 For samples collected from the various treatment plants which are to be physically composited prior to analysis or for the results of analyses which are to be arithmetically composited, the basis for compositing shall be the rate of discharge from the various plants to the ocean, not the rate of inflow to the various plants.

2 Five days per week except seven days per week for at least one week in July or August of each year.

3 The minimum frequency of monitoring for this constituent shall be automatically increased to twice the minimum frequency specified here if any analysis for this constituent yields a result higher than the effluent limit specified in Order No. 99-72 for this constituent. The increased minimum frequency of monitoring shall remain in effect until the results of a minimum of four consecutive analyses for this constituent are below all effluent limits specified in Order No. 99-72 for this constituent.

4 The minimum frequency of monitoring for this constituent is automatically reduced to annually if the results of twelve consecutive analyses, representing each month of the year, or the results of twenty-four consecutive analyses, representing each quarter of the year, are below the Ocean Plan 6-month median water quality objective for this constituent, or below the laboratory MDL for this constituent in the matrix being analyzed, whichever is higher.

5 The discharger may at its option monitor for total chromium. If the measured total chromium concentration exceeds the hexavalent chromium limitation, it will be assumed that the hexavalent chromium limitation was exceeded unless the results of a hexavalent chromium analysis of a replicate sample indicate otherwise. When analyzing for hexavalent chromium, the appropriate sampling and analytical method must be used (i.e., 24-hour composite cooled to 4° C and analyzed within 24 hours.

6 Monitoring of Total Chlorine Residual is not required on days when none of the treatment facilities that are subject to Order No. 99-72 use chlorine for disinfection. If only one sample is collected for total Chlorine residual analysis on a particular day, that samples must be collected at the time when the concentration of total chlorine residual in the discharge would be expected to be greatest. The times of chlorine discharges on the days the samples are collected, and the time at which samples are collected shall be reported.

7 A screening period for chronic toxicity shall be conducted every other year for three quarters, using a minimum of three test species (one plant, one invertebrate, and one vertebrate) chosen from the list of approved chronic toxicity test protocols specified in the 1997 Ocean Plan. After the screening period, the most sensitive species (i.e. the species exhibiting the lowest NOEL) shall be used for the quarterly testing. Repeat screening periods may be terminated after the first month if the most sensitive species is the same as the species previously found to be most sensitive.

Results for chronic toxicity shall be submitted, electronically, in the TOXIS version 2.4-database format. After one year, the data will be evaluated by regional board staff to determine if a reduction in the minimum monitoring

frequency is appropriate. If the Executive Officer determines that a reduction in the minimum monitoring frequency is appropriate, the minimum monitoring frequency will be specified by the Executive Officer.

8 EPA method 8280 shall be used to analyze for TCDD equivalents.

[9] at the surface.

[10] If the discharger demonstrates to the satisfaction of the Executive Officer, by means of daily analyses, that the concentrations of total and fecal coliform bacteria in the effluent are consistently less than 1,000 per 100 mL, enterococcus monitoring may be suspended. The discharger shall conduct the monitoring as specified unless the Executive Officer provides written authorization to suspend it. If this monitoring is suspended, the discharger shall resume it at the request of the Executive Officer.

[11] At surface and mid-depth.

[12] At surface, mid-depth, and bottom.

[13] ***Sampling techniques will follow those employed by biologist divers of the California State Department of Fish and Game. In sandy areas, a 30 meter band transect, one meter wide, shall be established on the ocean bottom. Operations at each underwater station shall include: (1) Water temperature (may be measured from a boat), estimated visibility and pelagic macrobiota at each 10-foot depth increment throughout the water column and at the bottom recorded; (2) general bottom description recorded; (3) height, period, and crest direction of ripple marks recorded; (4) amount, description, and location of detritus on bottom recorded; (5) representative photographic record of sampled area taken; and (6) within each band, three cores of at least 42.5 cm^2 in area shall be randomly taken to a depth of 15 cm where possible, (the three cores may be taken from a boat) and the material removed sifted through at least a 1 millimeter mesh screen, and all organisms identified to as low a taxon as possible, enumerated, measured, and reproductive conditions assessed where feasible.